

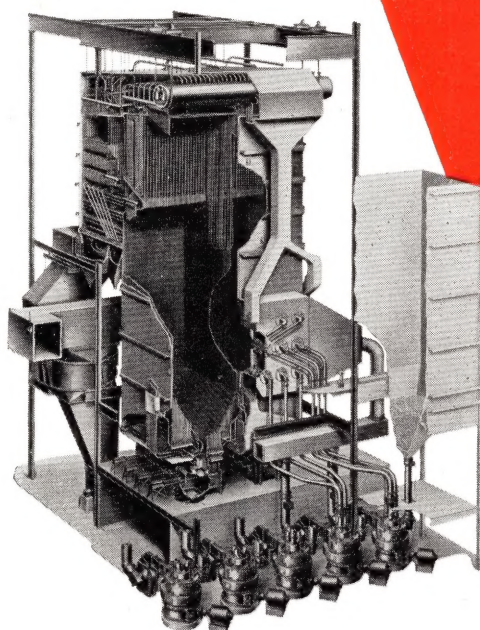
# B & W

## **boilers and boiler components** for Central Station, Industrial, and Commercial Power Plants

*a single responsibility*

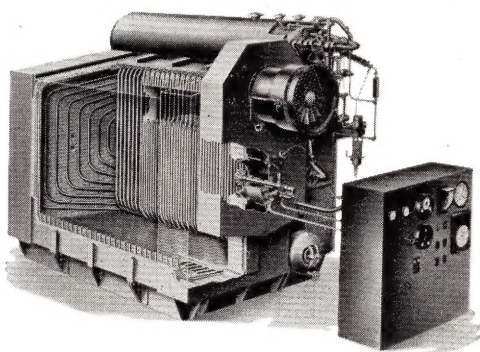
An important advantage in the selection of B & W steam generating equipment is the ability of The Babcock & Wilcox Company to furnish completely integrated units—from raw-coal feeders or fuel oil tanks to breechings and stacks—backed by the undivided responsibility of a single manufacturer.

6a  
Ba



### **Radiant Boiler**

Typical design of B&W Radiant Boiler for pulverized-coal firing. Capacity 1,300,000 lb of steam per hour when operating at 1500 lb per sq inch and a steam temperature of 1050 F.



### **Integral-Furnace Boiler Type FM**

Typical B&W Integral-Furnace Boiler, Type FM, designed for automatic operation with oil or gas firing. Capacities from 2,800 to 28,000 lb of steam per hour with pressures up to 250 lb per sq inch.

This new small-size boiler is a standardized unit—assembled at the B&W plant and shipped complete, ready for installation, thus eliminating the usual necessary field erection work. Additional advantages include low-cost automatic operation, reliable, efficient service, and many other important features performance-proved in larger capacity B&W Integral-Furnace Units.



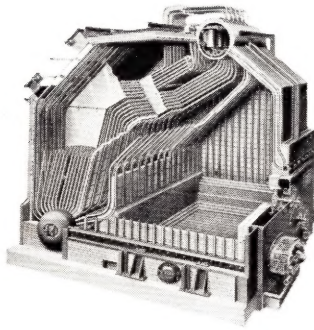
**THE BABCOCK & WILCOX COMPANY**  
**BOILER DIVISION**

*Helping Industry Cut Steam Costs Since 1867*



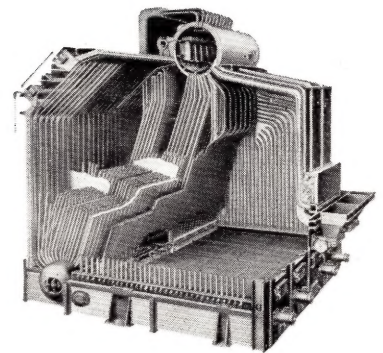
### Type FF

Typical B&W Integral-Furnace Boiler, Type FF, designed for firing with spreader stoker. Capacity 36,000 lb of steam per hour with 240 lb. per sq. inch operating pressure at the superheater outlet and 460 F total steam temperature.



### Type FJ

Typical B&W Integral-Furnace Boiler, Type FJ, designed for oil firing. Capacity 50,000 lb of steam per hour with 120 lb per sq inch operating pressure at the superheater outlet and 450 F total steam temperature.



## *Integral-Furnace boilers*

For Steam Requirements from 2800 to 350,000 lb per hr

Because of the wide acceptance of the original B&W Integral-Furnace Boiler, introduced in 1933, B&W has since made available five types of Integral-Furnace Boilers of improved design. They embody new installation, operating, and maintenance features that make possible greater boiler efficiency, availability, continuity of service, and overall economy.

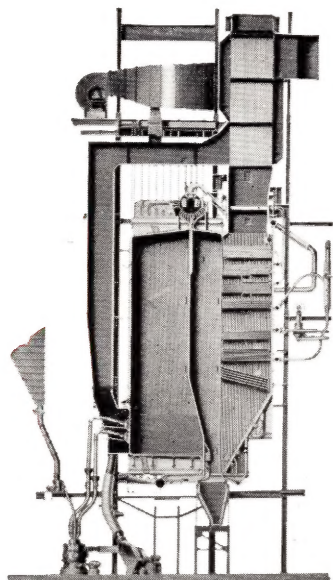
These B&W Integral-Furnace Boilers, provide an unusual range of steam requirements for a great variety of industrial and other users. They are compact, self-contained steam generating units; provide high steam capacity in small boiler room space; high



## *boilers*

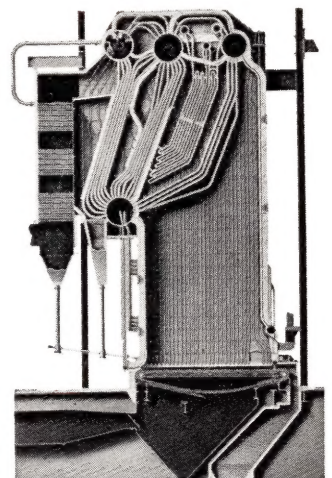
### Open-Pass Boiler

Typical B&W Open-Pass Boiler designed for pulverized-coal firing. Capacity 900,000 lb of steam per hour with 950 lb per sq inch operating pressure at the superheater outlet and 950 F total steam temperature.



### The Stirling Boiler

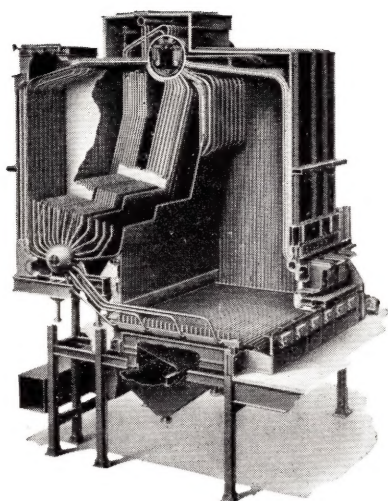
Typical Stirling Boiler arranged for firing with traveling-grate stoker. Capacity 125,000 lb of steam per hour with 675 lb per sq inch operating pressure at the superheater outlet and 825 F total steam temperature.





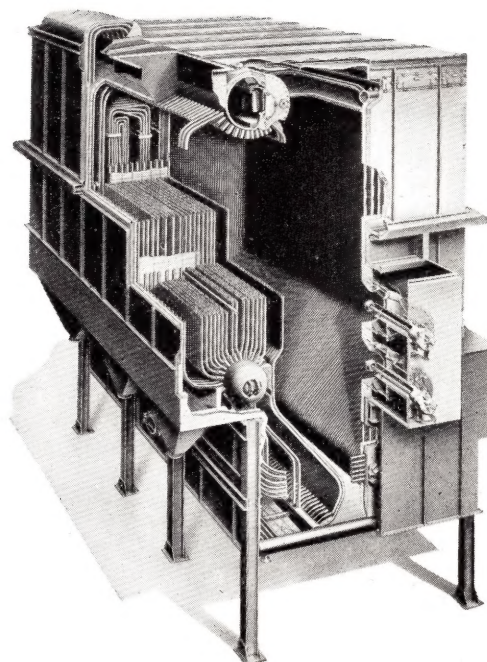
**Type FL**

Typical B&W Integral-Furnace Boiler, Type FL, designed for stoker firing. Capacity 100,000 lb of steam per hour with 475 lb per sq inch operating pressure at the superheater outlet and 575 F total steam temperature.



fuel economy, smokeless combustion, and economical fast steaming. They produce clean, dry steam at all ratings, and have a quick response to wide and heavy load swings. These boilers have water-cooled furnaces. They are easy to inspect and clean, available with or without a superheater, and are adaptable to stoker, pulverized coal, oil, or gas firing.

Year after year, these B&W Integral-Furnace Boilers have been the leading choice for industrial, utility, and commercial power plants—a service-proved endorsement of B&W dependability and economy—and your proof of lower steam costs with higher service life when you choose B&W.



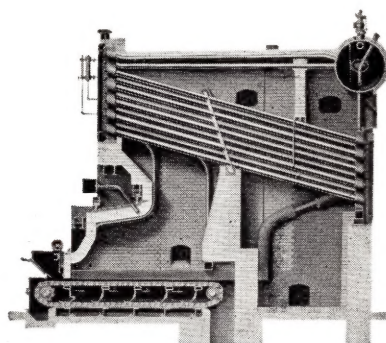
**Type FH** Typical B&W Integral-Furnace Boiler, Type FH, with hopper bottom. This unit is designed for pulverized-coal or oil firing, and has a capacity of 200,000 lb of steam per hour with 880 lb per sq inch operating pressure at the superheater outlet and 900 F total steam temperature. This boiler is also available with flat floor.

## THE BABCOCK & WILCOX COMPANY

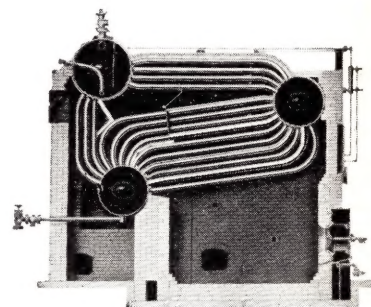
### BOILER DIVISION

**Design 32 Boiler**

Typical B&W Design 32 Cross-Drum Boiler designed for firing with chain-grate stoker. Capacity 25,000 lb of steam per hour with saturation temperature.

**Type H Stirling Boiler**

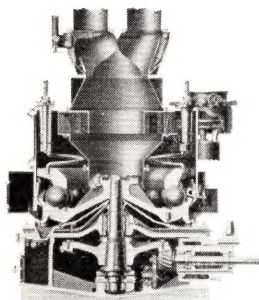
Typical Type H Stirling Boiler designed for oil or gas firing. Capacity 40,000 lb of steam per hour with 115 lb per sq inch operating pressure with saturation temperature.







## boiler components



### B & W pulverizer for coal

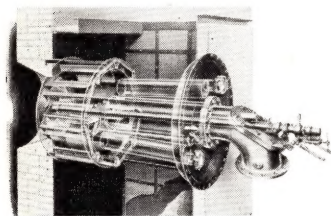
Exceptionally high availability and uniform fineness due to unique ball-bearing principle of grinding. Responds quickly to load changes. Raw coal having high surface moisture can be handled easily without loss of capacity. Dust-tight protection, and pressure lubrication assure long life for bearings and gears.

### Bailey pulverized-coal feeder

Delivers pulverized coal uniformly from storage bins to pulverized-coal burners.

### B & W chain-grate stokers

Three types based on grate area: Standard, to 145 sq. ft.; Intermediate, to 420 sq. ft.; Heavy Duty, to 704 sq. ft.



### B & W pulverized-coal burners

Turbulent type for quick ignition and rapid combustion with short flame travel. Heat-liberating capacities up to 144,000,000 Btu per burner per hour.

### B & W multi-fuel burners

Efficiently burn pulverized coal, oil, and gas, together or individually.

### B & W mechanical-atomizing oil burners

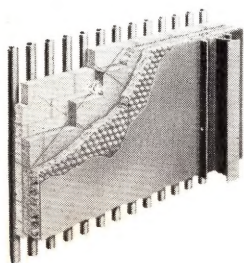
Highly efficient at all rates of fuel feed, and will properly atomize all commercial grades of fuel oil.

### B & W air heaters

Gas and air tight. Designed for low draft loss, flexibility, and low maintenance.

### B & W economizers

Made in five types, all sizes, and for all pressures, to meet any installation requirement.



### B & W water-cooled walls

Adaptable to furnaces of a wide variety of sizes, shapes, and forms, and to any type of fuel or method of firing. Make lower maintenance costs possible on furnace refractories. Permit air-tight structures, and give maximum realization of available heat in the fuel.

## products of The Babcock & Wilcox Company, Boiler Division

### Water Tube Boilers

For Public Utility Power Plants  
For Industrial Power and Process Plants  
For Heating Plants  
For Marine Service

### Water-Cooled Furnaces

#### Superheaters

#### Attenuators

#### Economizers

#### Air Heaters

#### Pulverized-Coal Equipment

#### Chain-Grate Stokers

#### Oil, Gas and Multi-Fuel Burners

#### Process Equipment

#### Recovery Processes for the Pulp Industry

#### Pulverizers for Cement Materials, Rock Products and Ores

#### Alloy Castings

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